



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/960,447

09/21/2001

Paul Geoffrey Clarke

GB920000093US1

5772

7590

07/14/2004

A. Bruce Clay
IBM Corp, IP Law Dept T81/503
3039 Cornwallis Road
PO Box 12195
Research Triangle Park, NC 27709-2195

EXAMINER

ELMORE, REBA I

ART UNIT

PAPER NUMBER

2187

DATE MAILED: 07/14/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,447

Applicant(s)

CLARKE ET AL.

Examiner

Reba I. Elmore

Art Unit

2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are presented for examination.

Specification

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. A copy of the references cited on pages 18 and 19 of the disclosure is required since these non-patent references are not patent documents and therefor are not readily available for consideration during the examination of the application.
5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Frey et al.
8. Frey teaches the invention (claim 1) as claimed including a method of communicating message data between a plurality of subsystems which are distributed across a data

communications network as a message processing facility (e.g., see col. 3, lines 25-61), the method comprising:

coupling the distributed subsystems together through a coupling means with a shared memory as part of systems such as an SYSPLEX which includes a coupling facility that enables data (including messages) and processing facilities to be shared by all the systems connected to the coupling facility (e.g., see col. 2, lines 7-40);

providing at least one shared queue in the shared memory as the coupling facility which has the structured external storage facility (e.g., see 4, lines 47-56);

providing access to the shared queue from each of the coupled subsystems (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52); and,

communicating message data between the distributed subsystems by means of the shared queue (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52).

As to claim 2, Frey teaches the plurality of subsystems is a distributed network of resource managers (e.g., see Figure 1).

As to claim 3, Frey teaches the plurality of subsystems are all part of a sysplex (e.g., see col. 2, lines 7-40).

As to claim 4, Frey teaches at least one application program is connected to a subsystem with the subsystem managing the message data for the application programs (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52).

As to claim 5, Frey teaches the coupling means is a coupling facility with list structures for a shared queue and a database (e.g., see Figure 1 and col. 4, line 47 to col. 6, line 57).

As to claim 6, Frey teaches the database stores queue definitions for the shared queue as part of the SES facility which stores queue definitions as part of the list structures (e.g., see Figure 1).

As to claim 7, Frey teaches shared queues includes a shared transmission queues as the SES facility which is also a coupling facility (e.g., see Figure 1).

As to claim 8, Frey teaches each subsystem has a long running process to check the shared queues for message data for that subsystem as activities associated with the necessary polling techniques (e.g., see col. 2, line 7 to col. 3, line 61).

As to claim 9, Frey teaches the subsystems also have local non-shared queues as each CPC having its own message and support facilities and although messages may be stored in both the CPC and the SES parts of the system, the CPC queues are not themselves shared (e.g., see Figure 1).

As to claim 10, Frey teaches the message data is sent from a first subsystem to a second subsystem by the first subsystem putting a message to a second subsystem by the first subsystem putting a message on a shared queue and the second subsystem getting the message from the shared queue (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52).

9. Frey teaches the invention (claim 11) as claimed including an apparatus for communicating message data (e.g., see col. 3, lines 25-61) comprising:

a plurality of subsystems distributed across a data communications network (e.g., see Figure 1);

a coupling means with a shared memory with the shared memory having at least one shared queue (e.g., see Figure 1);

means associated with each subsystem for accessing the shared queue (e.g., see Figure 1);
and,

message data is communicated between the distributed subsystems by means of the
shared queue (e.g., see Figure 1).

As to claim 12, Frey teaches the plurality of subsystems is a distributed network of
resource managers as each CPC having its own resource management capabilities (e.g., see
Figure 1 and col. 4, line 47 to col. 5, line 52).

As to claim 13, Frey teaches the plurality of subsystems are all part of a sysplex (e.g., see
col. 2, lines 8-40).

As to claim 14, Frey teaches an application program is connected to a subsystem with the
subsystem managing the message data for the application programs (e.g., see Figure 1 and col. 4,
line 47 to col. 5, line 52).

As to claim 15, Frey teaches the coupling means is a coupling facility with data structures
for the shared queue and a database (e.g., see Figure 1, element 110).

As to claim 16, Frey teaches the database stores the queue definitions for the shared
queue as part of the SES facility which stores queue definitions as part of the list structures (e.g.,
see Figure 1).

As to claim 17, Frey teaches the shared queue includes a shared transmission queue as
part of the SES facility which is a coupling facility (e.g., see Figure 1).

As to claim 18, Frey teaches each subsystem has a long running process to check the
shared queue for message data for that subsystem as activities associated with the necessary
polling techniques (e.g., see col. 2, line 7 to col. 3, line 61).

As to claim 19, Frey teaches the subsystems also have local non-shared queues as each CPC having its own message and support facilities and although messages may be stored in both the CPC and the SES parts of the system, the CPC queues are not themselves shared (e.g., see Figure 1).

10. Frey teaches the invention (claim 20) as claimed including a computer program comprising computer readable program code for performing the steps of:

providing a shared queue in a shared memory as part of the SES facility (e.g., see Figure 1);

providing access to the shared queue from each of a plurality of subsystems coupled to the shared memory wherein the subsystems are distributed across a data communications network (e.g., see Figure 1); and,

communicating data between the distributed subsystems by means of the shared queue (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52).

11. Frey teaches the invention (claim 21) as claimed including an apparatus for communicating message data within a distributed data communications network (e.g., see col. 3, lines 25-61), the apparatus including a resource manager for receiving messages from input message queues and forwarding the messages to destination message queues, the resource manager including:

a coupling facility manager component providing connection services for the resource manager to connect to a coupling facility list structure to perform operations on list structure entries including connection with the coupling facility manager as being part of the SES facility (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52);

a message retrieval agent for accessing at least one shared queue in shared memory associated with the coupling facility (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52); and, wherein the message retrieval agent enables the resource manager to access messages directly from the shared queue of a connected coupling facility (e.g., see Figure 1 and col. 4, line 47 to col. 5, line 52).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reba I. Elmore, whose telephone number is (703) 305-9706. The examiner can normally be reached on M-TH from 7:30am to 6:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor for AU 2187, Donald Sparks, can be reached for general questions concerning this application at (703) 308-1756. Additionally, the official fax phone number for the art unit is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center receptionist whose telephone number is (703) 305-3800/4700.



Reba I. Elmore
Primary Patent Examiner
Art Unit 2187

June 27, 2004